

IN THE CLAIMS

1. (Currently amended) An electronic device, comprising: a data storage device for storing N data elements, N being an integer with a value of at least two, the data storage device comprising a first collection of data storage elements; and an address decoder having an output coupled to the first collection of data storage elements for accessing a data storage element from the first collection of data storage elements on the basis of a bit pattern; ~~characterized by further comprising an address generator comprising a modulo-N counter for generating the bit pattern; wherein the electronic device is arranged to:~~ perform a read operation on the data storage element in a first phase of a control signal; and perform a write operation on the data storage element in a second phase of the control signal.

2. (Currently amended) An electronic device, as claimed in claim 1, ~~characterized by~~ comprising a look-up table being operable as the first collection of data storage elements in a data storage configuration of the electronic device.

3. (Canceled)

4. (Currently amended) An electronic device as claimed in claim 3, ~~characterized in that~~wherein a data storage element comprises a configurable switch coupled between a memory element and a data input of the data storage device; the configurable switch being conductive during at least a part of the second phase of the control signal.

5. (Currently amended) An electronic device as claimed in claim 3, ~~characterized by~~wherein the data storage device further comprising a second collection of data storage elements in at least a data storage configuration of the electronic device; the electronic device further comprising control circuitry coupled between the control signal and the data storage device for selecting one of the first and second collection of data storage elements responsive to a selection signal.

6. (Currently amended) An electronic device as claimed in claim 5, ~~characterized by~~wherein the second collection of data storage elements being responsive to the address decoder.

7. (Currently amended) An electronic device as claimed in claim 5, ~~characterized by~~wherein the data storage device comprising a third collection of data storage elements and a fourth collection of data storage elements in at least the data storage configuration of the electronic device, the third collection and the fourth collection of data storage elements being responsive to a further address decoder; the control circuitry further being arranged to select one of the first, second, third and fourth collection of data storage elements responsive to the selection signal and a further selection signal.

8. (Currently amended) An electronic device as claimed in claim 7, ~~characterized in that~~wherein the selection signal and the further selection signal are derived from the most significant bits of the bit pattern.

9. (Currently amended) An electronic device as claimed in claim 5, ~~characterized in that~~wherein the control circuitry further comprises a configuration network for configuring a size of the data storage device.